

Title (en)
METHOD AND FULL-DUPLEX COMMUNICATION DEVICE FOR ACQUIRING CHANNEL RESPONSE OF SELF-INTERFERING CHANNEL

Title (de)
VERFAHREN UND VOLLDUPLEXKOMMUNIKATIONSVORRICHTUNG ZUR ERFASSUNG DER KANALANTWORT EINES SELBSTINTERFERENZKANALS

Title (fr)
PROCÉDÉ ET DISPOSITIF DE COMMUNICATION EN DUPLEX INTÉGRAL DESTINÉS À L'ACQUISITION D'UNE RÉPONSE DE CANAL D'UN CANAL D'AUTO-INTERFÉRENCE

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Abstract (en)
The present invention is applicable in the technical filed of communications. Provided are a method and full-duplex communication device for acquiring a channel response of a self-interfering channel. The method comprises: first, employing multiple reference signals to perform a channel estimation on the self-interfering channel, acquiring a channel response estimated value of the self-interfering channel, where the time intervals between adjacent reference signals are less than a related time of the self-interfering channel, and where the frequency-domain intervals between the adjacent reference signals are less than a related bandwidth of the self-interfering channel, then, determining a stable range of each channel frequency-domain response on the basis of the channel response estimated value, and then randomly selecting a frequency point within the stable range of each channel frequency-domain response or selecting a frequency point of a greater channel response to serve as an emission frequency point of the reference signals, and, when an interrelation of the channel responses on the emission frequency point and on a non-emission frequency point is acquired, acquiring all of the channel responses on time-domain and frequency-domain directions on the basis of a reception signal corresponding to the reference signals on the emission frequency point. The present invention conserves reference signal resources used for estimation of the self-interfering channel.

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